IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) An injection molding apparatus, comprising:

~~provided with~~ a central control;

~~and with~~ a screw which extends in a cylinder, ~~which~~ the cylinder ~~is provided with~~ comprising a filling opening and ~~with~~ a nozzle, the screw being drivingly connected to ~~two~~ first and second controllable electric motors by a driving connection such that a movement in rotational and/or axial ~~sense~~ direction can be imposed on the screw, the driving connection comprising a number of cylindrical planetary rollers accommodated for rotation in a planetary cage such that the planetary rollers can be engaged from a space located radially outside the planetary cage and a space located radially within the planetary cage, the planetary cage being connected to the screw in a manner secured against rotation and translation[[,]];

~~while~~ a first drive part, connected to a rotor of the first electric motor, ~~is provided with~~ comprising a first engaging surface facing radially inward which engages the planetary rollers from the space located radially outside the planetary cage[[,]]; and

~~while~~ a second drive part, connected to a rotor of the second electric motor, ~~is provided with~~ comprising a second engaging surface facing outwards which engages the planetary rollers from a space located radially within the planetary cage.

2. (Currently amended) An injection molding apparatus according to claim l, wherein the planetary rollers are provided with parallel grooves and backs bounding each other mutually and which are located in planes extending perpendicularly to a central axis of a respective planetary roller, the first engaging surface comprising an inner thread and the second engaging surface comprising an external thread, wherein ~~while~~ the hand of the inner thread is opposite to the hand of the outer thread.

3. (Currently amended) An injection molding apparatus according to claim 2, wherein the ~~internal~~ inner thread has a similar angle pitch to the external thread but opposite hand.

4. (Currently amended) An injection molding apparatus according to claim 1, wherein the planetary rollers are provided with an external thread.

5. (Original) An injection molding apparatus according to claim 4, wherein the first engaging surface is provided with parallel grooves and backs bounding each other mutually and which are located in planes extending perpendicularly to a central axis of the first drive part.

6. (Currently amended) An injection molding apparatus according to claim 4 ~~or 5~~, wherein the second engaging surface is provided with parallel grooves and backs bounding each other mutually and which are located in planes extending perpendicularly to a central axis of the second drive part.

7. (Currently amended) An injection molding apparatus according to ~~any one of the preceding claims~~ claim 1, wherein the first drive part is fixedly connected to the rotor of the first electric motor, ~~while~~ and the second drive part is fixedly connected to the rotor of the second electric motor.

8. (Currently amended) An injection molding apparatus according to ~~any one of the preceding claims~~ claim 1, wherein each electric motor is provided with its own motor control, the ~~injection molding apparatus being provided with a~~ central control ~~which~~ is arranged for passing desired values of a ~~particular~~ control quantity to the two motor controls, ~~while~~ wherein in some phases of the injection process, the control quantity values passed by the central control are determined on the basis of force measurements or motor current measurements, wherein ~~while~~ in other phases they are determined on the basis of the desired positions of the screw in the cylinder.

9. (Currently amended) An injection molding apparatus according to claim 8, wherein the central control is arranged for having the injection molding apparatus traverse a plasticizing phase, and an injection phase ~~and, optionally, and after-pressure phase~~.

10. (Currently amended) An injection molding apparatus according to claim 8, wherein, for ~~the purpose of the~~ regulation based on force feedback, the central control measures as an input signal ~~the~~ a first electric current used by the first electric motor and ~~the~~ a second electric current used by the second electric motor, ~~while~~ and the central control is arranged for

determining, on the basis thereof, control quantity values to be passed to the motor controls to thus regulate ~~the~~ a filling pressure according to a desired pattern.

11. (Currently amended) An injection molding apparatus according to claim 8, ~~wherein the injection molding apparatus is provided with at least one~~ further comprising a force sensor~~, such as for instance, piezoelectric elements or strain gauges,~~ which measures a force exerted by the screw, the ~~at least one~~ force sensor being connected to the central control for the purpose of ~~the~~ force feedback, ~~while~~ wherein the central control to is arranged for determining control quantity values on the basis of a signal produced by the ~~at least one~~ force sensor, to be passed to the motor controls to thus regulate the filling pressure according to a desired pattern.

12. (Currently amended) An injection molding apparatus according to ~~any one of the preceding claims~~ claim 1, wherein the first and second electric motors each comprise a servomotor, each ~~of which~~ being provided with its own motor control, ~~while~~ and the central control is arranged for generating control quantity values of the same type and passing ~~these~~ the control quantity values to the motor controls of the servomotors.

13. (Currently amended) An injection molding apparatus according to ~~any one of claims 8 – 12~~ claim 8, wherein the control quantity is selected from ~~the group comprising~~ position, speed, acceleration and/or jerk, ~~while the selection can also comprise~~ or a combination ~~of these quantities~~ thereof.

14. (Currently amended) An injection molding apparatus according to ~~claims 2 and 10~~ claim 2, wherein the pitch of the ~~internal~~ inner thread and the external thread is ~~so large~~ such that ~~the~~ an axial force the screw experiences in use can be accurately derived from ~~the~~ motor ~~current~~ currents used by the first and second electric ~~motor~~ motors.

15. (Currently amended) An injection molding apparatus according to ~~any one of the preceding claims~~ claim 1, wherein the first and the second electric motor are coaxially arranged.

16. (Currently amended) An injection molding apparatus according to ~~any one of the preceding claims~~ claim 1, wherein ~~the~~ a drive housing is mounted on a slide ~~which is provided with~~ comprising a~~, preferably electric,~~ drive for moving the drive housing and the cylinder connected therewith in axial direction.

17. (Currently amended) A method for manufacturing an injection molded product ~~while utilizing an injection molding apparatus according to any one of the preceding claims~~, the method comprising:

~~wherein the~~ varying a rotational direction and ~~the~~ a rotational speed of ~~the~~ a first and a second electric motor of an injection molding apparatus including a screw which extends in a cylinder, the cylinder comprising a filling opening and a nozzle, the screw being drivingly connected to the first and second electric motors by a driving connection, the driving connection comprising a number of cylindrical planetary rollers accommodated for rotation in a planetary cage such that the planetary rollers can be engaged from a space located radially outside the planetary cage and a space located radially within the planetary cage, the planetary cage being connected to the screw in a manner secured against rotation and translation, a first drive part, connected to a rotor of the first electric motor, comprising a first engaging surface facing radially inward which engages the planetary rollers from the space located radially outside the planetary cage, and a second drive part, connected to a rotor of the second electric motor, comprising a second engaging surface facing outwards which engages the planetary rollers from a space located radially within the planetary cage, ~~are varied~~ such that the planetary cage and ~~hence~~ the screw are operatively rotated and/or translated in an axial direction according to a desired pattern and/or while exerting a desired axial force, ~~while~~ wherein ~~the~~ a power required for the axial translation is provided by the ~~two~~ first and second electric motors and ~~the~~ a power required for the rotation is provided by the ~~two~~ first and second electric motors.

18. (Currently amended) A method according to claim 17, ~~wherein the injection molding apparatus traverses~~ further comprising traversing in one cycle of the injection molding apparatus a plasticizing phase, and an injection phase ~~and, optionally, an after-pressure phase~~.

19. (Currently amended) A method according to claim 17, ~~wherein the central control~~ further comprising calculating, based on force feedback, ~~calculates~~ desired control quantity values and ~~passes these~~ passing the desired control quantity values to ~~the two~~ first and second motor controls of the ~~two~~ first and second electric motors, respectively, ~~while~~ and in ~~the~~ an injection phase, independently of forces associated therewith, ~~the central control~~ directly ~~passes~~ passing the desired control quantity values to the ~~two~~ first and second motor controls.

20. (Currently amended) A method according to claim 19, wherein, for ~~the purpose of the~~ regulation based on force feedback, the ~~central control obtains~~ method further comprises obtaining as an input signal ~~the~~ an electric current used by the first electric motor and ~~the~~ an electric current used by the second electric motor, ~~while~~ and, on the basis thereof, ~~the central control passes~~ passing the desired control quality values to the first and second motor controls so that ~~the~~ a filling pressure proceeds according to a desired pattern.

21. (Currently amended) A method according to claim 19, wherein, for ~~the purpose of the~~ regulation based on force feedback, the ~~central control obtains~~ method further comprises obtaining as an input signal ~~the~~ force measuring signals detected by ~~the~~ force sensors on the screw, ~~while~~ and, on the basis thereof, ~~the central control passes desired~~ passing the desired control quantity values to the first and second motor controls so that ~~the~~ a filling pressure proceeds according to a desired pattern.

22. (Currently amended) A method according to ~~any one of claims~~ claim 19 ~~–21~~, wherein the control quantity is ~~the~~ a position, ~~the~~ a speed, ~~the~~ an acceleration or a jerk or a combination thereof.

23. (New) An injection molding apparatus according to claim 9, wherein the central control is further arranged for having the injection molding apparatus traverse an after-pressure phase.

24. (New) An injection molding apparatus according to claim 11, wherein the force sensor is a piezoelectric element or a strain gauge.

25. (New) An injection molding apparatus according to claim 16, wherein the drive is an electric drive.

26. (New) A method according to claim 18, further comprising traversing, in the one cycle, an after-pressure phase.